Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's Rules	)	WT Docket No. 97-81
Regarding Multiple Address Systems	)	

NOTICE OF PROPOSED RULE MAKING

Adopted: February 19, 1997 **Released:** February 27, 1997

Comment Date: April 21, 1997
Reply Comment Date: May 6, 1997

By the Commission:

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I. INTRODUCTION

1. In this *Notice of Proposed Rule Making* ("*Notice*") we examine ways to maximize use of spectrum allocated to Multiple Address Systems ("MAS") in the Fixed Microwave Services.[1] MAS operate on spectrum in the middle of the 900 MHz band,[2] where a wide variety of mobile and fixed applications are technically feasible. This action is part of our continuing effort to establish a flexible regulatory framework for spectrum allocations that will, among other things, provide opportunities for continued development of competitive new service offerings by allowing flexible use of spectrum, expedite market entry through modified licensing procedures, and promote technological innovation by eliminating unnecessary regulatory burdens. To meet these objectives, we propose to (1) convert licensing of MAS spectrum, for which the principal use will involve, or is reasonably likely to involve, "subscriber-based" services, from site-by-site licensing to geographic area licensing, (2) simplify and streamline the MAS licensing procedures and rules, (3) increase licensee flexibility to provide communication services that are responsive to dynamic market demands, and (4) employ competitive bidding procedures to resolve mutually exclusive applications for MAS spectrum. In addition, we temporarily suspend the acceptance and processing of some MAS applications. This suspension is effective as of the adoption of this *Notice*.

[1] MAS is a point-to-multipoint, multipoint-to-point service licensed under Parts 22 and 101 of the Commission's Rules, 47 C.F.R. Parts 22 and 101. It is referred to as point-to-multipoint under Part 22. *See* 47 C.F.R. § 22.621.

[2] As noted *infra* in text, the 928-929 MHz, 932-932.5 MHz, 941-941.5 MHz, 952-952.85 MHz, 956.25-956.45, and 959.85-960 MHz bands are allocated for MAS. Altogether, there is 3.2 megahertz of spectrum in the 900 MHz band specifically allocated for MAS.

II. EXECUTIVE SUMMARY

2. Our proposals herein are intended to facilitate the further development and implementation of MAS. The proposals include streamlined licensing procedures that provide licensees sufficient flexibility to use various technologies and offer a broad range of communications services. The following is a synopsis of our major proposals. This *Notice*:

- Tentatively concludes that the 932/941 MHz and 928/959 MHz MAS bands should be designated for subscriber-based services and licensed on a geographic areas basis.
- Tentatively concludes that the 928/952/956 MHz MAS bands should be designated exclusively for private use and seeks comment on whether these bands should continue to be licensed on a site-by-site basis or should be licensed on a geographic basis.
- Proposes to define service areas based on the U.S. Department of Commerce's Economic Areas.
- Seeks comment on whether each license should permit use of 12.5 kHz of spectrum or a larger block of spectrum.
- Proposes to simplify and streamline the MAS licensing process.
- Proposes liberal construction/coverage requirements for geographic area licensees.
- Proposes to allow all licensees to provide mobile and fixed operations on a co-primary basis for point-to-point and point-to-multipoint operations.
- Proposes to resolve mutually exclusive applications for 932/941 MHz and 928/959 MHz licenses through competitive bidding.
- Proposes to set aside five channel pairs in the 932/941 MHz band, to be licensed on a first-come, first-served basis, for Federal Governmental/Public Safety operations.
- Proposes to establish a presumption that MAS 932/941 MHz and 928/959 MHz licensees are telecommunications carriers.
- Immediately suspends the acceptance and processing of applications in the 932/941 MHz and 928/959 MHz bands, except certain pending applications, applications for minor modifications, and applications for license assignment or transfer of control, during the pendency of this rulemaking. This suspension does not affect applications for MAS licenses for private operations in the 928/952/956 MHz bands.

3. While our proposals are designed to foster MAS service, the Commission makes no representations or warranties about the use of this spectrum for particular services. Applicants should be aware that an FCC auction represents an opportunity to become an FCC licensee in this service, subject to certain conditions and regulations. An FCC auction does not constitute an endorsement by the FCC of any particular services, technologies or products, nor does an FCC license constitute a guarantee of business success. Applicants should perform their individual due diligence before proceeding as they would with any new business venture.

III. BACKGROUND

4. In the early 1980's, the Commission allocated spectrum and established service rules for 900 MHz point-to-multipoint, multipoint-to-point ("point-to-multipoint") operations, commonly referred to as MAS. The rules we adopted permitted both two-way and one-way MAS operations. Two-way operations usually consist of one or more control or base stations (commonly referred to as master stations)[3] and a minimum of four interacting remote stations.[4] A typical one-way operation consists of one or more master stations.[5] To date, these point-to-multipoint systems have been used primarily by the power, petroleum and security industries to satisfy various alarm, control, interrogation and status reporting requirements, and by the paging industry to control multiple paging transmitters in the same general geographic area.

5. In 1981, we allocated twenty 25-kilohertz channel pairs in the 928-929 MHz and 952-953 MHz bands for exclusive, private use by Power Radio Service eligibles for energy distribution automation.[6] We later allocated fourteen 25-kilohertz channel pairs in the same bands and eight 25-kilohertz unpaired channels in the 956 MHz band for private MAS operations by all entities eligible under former Part 94 of our Rules, the Private Operational-Fixed Microwave ("POFM") Service.[7] The Commission also allocated six 25-kilohertz paired channels in the 928

[3] *See* 47 C.F.R. § 101.3.

[4] *See* 47 C.F.R. § 101.147(b).

[5] *See id.*; 47 C.F.R. § 22.623.

[6] Amendment of the Commission's Rules To Reallocate Forty Eight 25 kHz Channels in a Certain MHz Range for Multiple Address Radio Systems; and To Establish a New Standard for Frequency Tolerance on Specific MHz Multiple Address Channels, SS Docket No. 79-18, *Report and Order*, 47 Fed. Reg. 6869 (January 30, 1981); *see* 47 C.F.R. § 90.63. Energy distribution automation systems are a type of MAS operation that use remote radio transceivers located at customers' premises to enable utilities to control energy peak usage through load management techniques. These systems are used to promote fuel savings and efficiency.

[7] Amendment of the Commission's Rules To Reallocate Forty Eight 25 kHz Channels in a Certain MHz Range for Multiple Address Radio Systems; and To Establish a New Standard for Frequency Tolerance on Specific MHz Multiple Address Channels, SS Docket No. 79-18, *Second Report and Order*, 47 Fed. Reg. 6,869 (February 17, 1982). Previously, Part 94 contained rules for the Private Operational Fixed Microwave ("POFM") Service. Part 94 eligibles were persons (individuals, partnerships, associations, joint stock companies, trusts, or corporations), governmental entities, or agencies eligible to provide POFS under Parts 80, 87, or 90, or entities proposing to provide

and 959 MHz bands[8] for common carrier Domestic Public Land Mobile ("DPLM") use under Part 22 of our Rules for control of wide-area paging networks.[9] In an effort to facilitate the efficient use of this "pool" approach, we adopted sharing criteria. Specifically, under our current rules, if the MAS channels available under the POFM pool have been licensed in a given geographic area, Part 101 eligibles may apply for MAS channels allocated for DPLM operations, and *vice versa*.[10] Later, at the request of the MAS community, the Commission further modified the rules and policies governing MAS operations, including establishing a standard mileage separation and reducing the channel spacing from 25 kilohertz to 12.5 kilohertz, in order to increase spectrum efficiency and reduce regulatory burdens.[11]

6. In 1989, the Commission allocated, for both Federal Governmental and non-Governmental point-to-multipoint use, an additional forty 12.5-kilohertz channel pairs in the 932-932.5 MHz and 941-941.5 MHz bands.[12] Governmental and non-Governmental use was to be coordinated by the Interdepartment Radio Advisory Committee ("IRAC") of the National Telecommunications and Information Administration ("NTIA"). By *Public Notice*, the Commission stated that it would open five two-day filing windows during January and February 1992, and thereafter license applicants on a first-come, first-served basis.[13] In the event that we received mutually exclusive applications, we indicated that lotteries would be used to select

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such service to such POFM eligibles. POFM services include any use of microwave frequencies other than for common carrier purposes. *See* former 47 C.F.R. § 94.5. We note that, effective August 1, 1996, we consolidated the service rules for fixed microwave operations, formerly in Parts 21 and 94, into Part 101. *See* Reorganization and revision of parts 1, 2, 21, and 94 of the rules to establish a new part 101 governing terrestrial microwave fixed radio services, WT Docket No. 94-148, Amendment of Part 21 of the Commission's Rules for the Domestic Public Fixed Radio Services, CC Docket No. 93-2, *Report and Order*, 11 FCC Rcd 13449 (1996).

[8] Although these channels are listed as paired, unpaired operation is permitted and, in fact, is the dominate mode of operation on the channels.

[9] *See* 47 C.F.R. § 22.623.

[10] *See* 47 C.F.R. § 101.147(b).

[11] Amendment of §§ 22.501(g)(2) and 94.65(a)(1) of the Rules and Regulations to Re-Channel the RM-5206 900 MHz Multiple Address Frequencies Amendment of § 94.65(a)(1) of the Rules of Revise Footnote 3 in the Frequency Table to Make the RM-5362 Frequencies Available for use by any Part 94 Eligible Amendment of Part 2 and §§ 94.63(d)(5) and 94.65(a)(1) Footnote 3 of the Rules to Permit Operation of Mobile RM-5178 Remote Meter Reading Systems on a Primary Basis on the Exclusive Power Radio Service Frequencies in the 952.3625-952.8375 MHz Band Amendment of Part 94 of the Rules to Permit Intrasystem Communications Among Multiple Address System RM-5383 Master Stations, PR Docket No. 87-5, *Report and Order*,3 FCC Rcd 1564 (1988).

[12] Amendment of Parts 1, 21, 22, 74, and 94 of the Commission's Rules to Establish Service and Technical Rules for Government and non-Government Fixed Service Usage of the Frequency Bands 932-935 MHz and 941-944 MHz,GEN Docket No. 82-243, *Second Report and Order*, 4 FCC Rcd 2012 (1989).

[13] *Public Notice*, DA 91-1422, 6 FCC Rcd 7242 (released Nov. 27, 1991).

among applicants.[14] In response to the series of filing windows, over 50,000 applications were filed for the available forty 12.5-kilohertz channel pairs in the 932-932.5 MHz and 941-941.5 MHz bands.

7. On August 10, 1993, the Omnibus Budget Reconciliation Act of 1993 ("Budget Act")[15] added Section 309(j) to the Communications Act of 1934, as amended ("Communications Act").[16] Section 309(j) permits the Commission, for certain classes of radio licenses, to employ competitive bidding procedures to choose among mutually exclusive applications for initial licenses. As a result, in the Competitive Bidding docket we examined various radio services to determine whether they should be subject to competitive bidding. In this connection, as described more fully *infra*, we determined at that time that POFM MAS did not qualify as subscriber-based and therefore should not be subject to competitive bidding.[17] Therefore, we noted that it would not be appropriate to use competitive bidding to award those POFM MAS licenses for which the 50,000-plus applications were pending, even in the event of mutual exclusivity.[18] Subsequently, we did a preliminary examination of the pending applications and found that the vast majority (over 95 percent) were filed by applicants seemingly proposing to use their licenses principally to provide subscriber-based service.

IV. DISCUSSION

8. In light of the substantial number of MAS applications filed in response to the 1992 filing windows and the type of proposed operations indicated, we are concerned that our initial assessment in the Competitive Bidding docket regarding the principal use of POFM MAS spectrum may not accurately reflect existing and future operations. We are aware that it has been eight years since our last comprehensive examination of MAS.[19] Given that the wireless industry, including MAS, has changed dramatically since the 1980's, we believe we must reexamine the current and future uses of and demand for MAS spectrum to determine the appropriate method by which to award the licenses associated with the numerous pending applications. As part of

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[14] *Id.*

[15] Pub. L. No. 103-66, Title VI, § 6002(a), 107 Stat. 312, 387 (1993) (Budget Act); *see* H.R. Conf. Rep. No. 213, 103d Cong., 1st Sess. 480-89 (1993), *reprinted in* 1993 U.S. Code Cong. & Admin. News 1169-78.

[16] *See* 47 U.S.C. § 309(j).

[17] Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, *Notice of Proposed Rule Making*, 8 FCC Rcd 7635, 7659-60 (1993); Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, PP Docket No. 93-253, *Second Report and Order*, 9 FCC Rcd 2348, 2354 (1994) (*Competitive Bidding Second Report and Order*).

[18] *Notice of Proposed Rule Making*, 8 FCC Rcd at 7660 n.156; *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2354 n.25.

[19] *See supra* para. 5.

this reexamination, we seek to establish a streamlined regulatory framework which will provide licensees sufficient flexibility to meet the public's current and future MAS needs. We begin with a review of our MAS service rules to determine whether they should be modified -- *e.g.*, whether we should retain a site-specific licensing approach or transition to geographic area licensing. We then address the mechanism by which we might select among mutually exclusive applications for initial licenses.

A. Spectrum Allocation

1. Treatment of the 932/941 and 928/959 MHz bands

9. A total of 3.2 megahertz (MHz) of radio spectrum is currently allocated for MAS, and this can be divided into three general categories. The first category, consisting of one megahertz of paired spectrum in the 932-932.5 MHz and 941-941.5 MHz bands (932/941 MHz bands), is available for both Federal Governmental and non-Governmental use.[20] These 12.5 kilohertz channels are used by common carrier and private radio licensees on a co-primary basis.[21] According to the Commission's licensing database, to date, these bands support only two Federal Governmental licensees, one in Alaska and one in Florida, and no non-Federal Governmental users. The second category, consisting of 300 kilohertz of paired spectrum in the 928.85-929 MHz and 959.85-960 MHz bands (928/959 MHz bands), is allocated for, and used primarily by, common carrier licensees under Part 22 of our Rules, and may also be used for private radio licensees pursuant to certain sharing criteria.[22]

10. Given the significant number of applications filed for the 932/941 MHz bands, we seek comment on whether we should modify the spectrum allocation for MAS based on current licensee operations and the applicants' proposed uses. As noted *supra*, of the over 50,000 applications filed for the 932/941 MHz bands, over 95 percent were filed by entities seemingly proposing to use their licenses principally to provide subscriber-based service.

11. Rather than evaluating the particular use made of these two discrete MAS spectrum groups and then designating them for common carrier or private use, we tentatively conclude that the groups are substitutable and consequently we will consider them as a whole in evaluating the demand for future use of MAS spectrum. As discussed above the majority use of the 928/959 MHz bands is subscriber-based. Similarly, there are over 50,000 applications pending for the 932/941 MHz bands, the overwhelming majority of which were filed by applicants seemingly proposing to use their licenses principally to provide subscriber-based service. One could argue that the substantial number of applications coupled with the subscriber-based use of the 928/959 MHz bands indicates that MAS is evolving into a service where licensees primarily seek to

[20] *See* 47 C.F.R. 101.147 (b), Table 7.

[21] *Second Report and Order*, GEN Docket No. 82-243, 4 FCC Rcd at 2014; 47 C.F. R. § 101.147(b)(4).

[22] *See* 47 C.F.R. § 22.621 and § 101.147, Table 5.

provide subscriber-based services. Thus, we tentatively conclude that the 928/959 MHz bands and the 932/941 MHz bands should be designated for subscriber-based services. We seek comment on this alternative. We encourage commenters to address the feasibility of the above alternative, as well as other possible allocations. If suggesting other spectrum allocations, commenters should include the rationale underlying their proposal.

2. Treatment of the 928/952/956 MHz bands

12. The third category, consisting of 1.7 megahertz of paired spectrum in the 928-928.85 and 952-952.85 MHz bands and 200 kilohertz of unpaired spectrum in the 956.25-956.45 MHz bands (928/952/956 MHz bands), is allocated for, and used primarily by, private radio licensees, and may be used by common carriers pursuant to certain sharing criteria.[23] The Commission's licensing database reveals, however, that the third category of MAS spectrum -- the 928/952/956 MHz bands -- appears currently to be used overwhelmingly for private service. While some of these licensees share some or all of their capacity on a for-profit, third-party, private carrier basis,[24] we estimate from our records that the majority of channels in this group are used by private systems to satisfy internal communication needs.[25] Specifically, we estimate that, of the approximately 7,700 licenses granted for use in this spectrum, about 70 percent have been granted to public safety, business, or industrial entities to satisfy internal communications needs.

13. Because currently the principal use of the band does not appear to involve subscriber-based services, we tentatively conclude that the 928/952/956 MHz bands should be designated exclusively for private, internal use. Under this approach, we would prohibit any further subscriber-based use of these channels by future licensees, whether on a private carrier basis or through sharing with common carrier licensees. We nonetheless would grandfather existing subscriber-based services currently being provided on these MAS frequencies. We ask for comment on whether existing or projected internal communications requirements of private service users justify creation of such a purely private allocation, including empirical analysis of projected private MAS spectrum needs.

B. MAS Licensing Approach

1. Geographic Area Licensing

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[23] *See id.* § 101.147 (b), Table 2.

[24] *See generally National Ass'n of Regulatory Utility Comm'ners v. FCC*, 525 F.2d 630 (D.C. Cir. 1976), *cert. denied*, 425 U.S. 992 (1976) (private carrier concept).

[25] In determining whether the General Category channels are principally used for subscriber-based services, we looked at the majority use of the band. *See* Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making*, PR Docket No. 93-144, GN Docket No. 93-252, PP Docket No. 93-253, 11 FCC Rcd 1463, 1535 (*800 MHz First Report and Order*).

14. As discussed above, MAS spectrum is located in various 900 MHz bands. In addition, the use of the service varies somewhat among the bands. Examples of differences in use include whether the channels are used for private or for common carriage, maximum power limitations, mileage separation requirements for co-channel users, and frequency separation requirements for master and remote station transmit channels. Similarities in use include use of the same type of equipment and mode of operation (point-to-multipoint). Under our current rules, MAS licensees file an application to license each transmitter site in the area they wish to serve. The particular mileage separation between co-channel assignments depends upon the type of operation.[26] We have concluded in other services that licensing based on pre-defined service areas -- geographic area licensing -- poses significant advantages over site-based licensing for entities providing subscriber-based services because of the greater operational flexibility it gives licensees and the greater ease of administration for the Commission.[27] We believe adopting geographic area licensing for any MAS bands for which the principal use will involve, or is reasonably likely to involve, subscriber-based services, would offer the same potential benefits. Therefore, we propose to use geographic area licensing in these bands. Licensing such systems by geographic area would simplify system expansion and reduce administrative burdens on both licensees and the Commission. We also propose herein, *see infra* paragraph 66, to set aside five channel pairs in the 932/941 MHz bands for Federal Governmental/Public Safety use. Because the principal use of these five channel pairs would therefore not involve the receipt of compensation for providing subscriber-based services, we would exclude them from our geographic licensing proposal.

15. We invite comment on our proposal to employ geographic area licensing in the MAS bands, particularly in the 928/959 MHz bands, where a number of systems are already licensed. We also request comment on whether, in the event that we find that the principal use of the 928/952/956 MHz bands involves, or is reasonably likely to involve, subscriber-based service, geographic area licensing should be employed. Alternatively, if we conclude that the principal use of the 928/952/956 MHz bands is likely to remain private, should the we continue to award MAS licenses in these bands on a site-by-site basis or use a geographic licensing approach? We also seek comment on which rules in this context should be modified even if we retain site-specific licensing on a first-come, first-served basis. Finally, we seek comment on whether the Part 22 rules concerning point-to-multipoint operations should be placed within Part 101.

2. Service Area

16. As part of our geographic area licensing proposal, we must determine the size of the geographic area that would be used to define MAS service boundaries. We have used several different geographic definitions in the past, when employing geographic licensing in the context

[26] There are different separation requirements for fixed and mobile operations. *See* 47 C.F.R. § 22.625 and § 101.105(c)(3).

[27] *See, e.g., Third Report and Order*, PR Docket Nos. 89-553, 93-144, GN Docket No. 93-252, 9 FCC Rcd 7988, 8044 (*CMRS Third Report and Order*).

of other services. For example, the service areas for Cellular Radiotelephone Service ("Cellular") and Interactive Video and Data Service ("IVDS") are based on Metropolitan Statistical Areas ("MSAs") and Rural Service Areas ("RSAs").[28] We have used Basic Trading Areas ("BTAs"),[29] Major Trading Areas ("MTAs"),[30] Regional Areas,[31] and a nationwide service area[32] for Personal Communications Services ("PCS") licensing. Also, we have used Economic Areas ("EAs") developed by the Bureau of Economic Analysis of the U.S. Department of Commerce ("Department of Commerce") for the General Wireless Communications Service and 800 MHz Specialized Mobile Radio Service (SMR) licensing.[33] We believe that the service area definition should approximate the typical geographic area that an MAS licensee seeks to serve.

17. After careful consideration, we tentatively conclude that EAs constitute the most appropriate geographic area licensing boundaries for MAS operations, and therefore propose that MAS geographic area licenses be based on EAs. We believe MSAs/RSAs are too small to create a viable wide-area service[34] and result in more administrative burdens for the Commission.[35] For the same reasons, we choose not to use BTAs. MTAs, EAs and regional licenses offer the advantage of being large enough to permit viable wide-area service, while also reducing the Commission's administrative burden. Of these three, EAs appear to best mirror the size and development of existing MAS systems. Further, under Sections 309(j) and 257 of the Communications Act of 1934, as amended, the Commission must seek to promote the dissemination of licenses to small businesses, rural telephone companies, and minority- and women-owned businesses, as well as identify and eliminate market entry barriers for

[28] The United States and its possessions are divided into 306 MSAs and 428 RSAs.

[29] Rand McNally organizes the 50 states and the District of Columbia into 47 MTAs and 487 BTAs. *See* Rand McNally, Inc., *Commercial Atlas & Marketing Guide*, 123rd Edition, pp. 38-39 (1992).

[30] *Id.*

[31] Narrowband PCS regional licenses are awarded for five regional areas (Northeast, South, Midwest, Central and West) that are made up of MTAs. *See* 47 C.F.R. § 24.102(b).

[32] *See First Report and Order*, GEN Docket No. 90-314, ET Docket No. 92-100, 8 FCC Rcd 7162 (1993) (*Narrowband PCS Report and Order*).

[33] The Department of Commerce divided the U.S. into 172 EAs for the purpose of economic analysis. Each EA consists of one or more economic nodes -- metropolitan areas or similar areas that serve as centers of economic activity -- and the surrounding counties that are economically related to the nodes. *See* "Final Redefinition of the BEA Economic Areas," 60 Fed. Reg. 13,114, 13,114-118 (Mar 10, 1995).

[34] *See* Amendment of the Commission's Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, *Memorandum Opinion and Order*, 9 FCC Rcd 4957, 4987 (1994).

[35] Larger areas offer advantages from an administrative perspective because they are more efficient for the Commission to license than smaller areas that require issuance of more licenses.

entrepreneurs and other small businesses seeking to enter the telecommunications field.[36] EAs are smaller than MTAs and regional licenses and therefore provide a better opportunity for small businesses and the other entities designate by statute to obtain a license. The use of EAs is therefore in the public interest and is consistent with Sections 309(j) and 257. As in other services where we have used EA-based licenses,[37] we propose to use a total of 175 service areas -- the 172 EAs specified by the Department of Commerce plus 3 EA-like areas for Guam and the Northern Marianas, Puerto Rico and the United States Virgin Islands, and American Samoa. We seek comment on both the use of EAs and on other options for defining service areas for MAS operations.

18. Additionally, we note that it has been seven years since we adopted a band plan for the 932/941 MHz bands and the communications marketplace has changed dramatically since that time. For example, we have witnessed a growing demand for regional and nationwide licenses, as evidenced by the success of the narrowband PCS auction. Accordingly, we seek specific comment on whether we should set aside a certain number of channel pairs in the 932/941 MHz bands for regional or nationwide use, and if so, the number of channel pairs that should be set aside.

3. Treatment of Incumbent Licensees

19. In tandem with our geographic area licensing proposal, we must assess the potential impact of the proposal on MAS incumbents currently licensed on a site-by-site basis. We are concerned about the potential effect of our proposal on MAS licensees operating in the 928/959 MHz bands[38] and on those operating in the 928/952/956 MHz bands. We tentatively conclude that, in the event we adopt a geographic area licensing approach, the public interest would be best served by allowing incumbent MAS licensees to continue operating under their current authorization. Under this proposal, geographic area licensees would be required to provide protection[39] to all co-channel systems[40] that are constructed and operating within their geographic

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[36] 47 U.S.C. §§ 257 and 309(j).

[37] We use EA-based licenses in the General Wireless Communications Service (GWCS) and for 800 MHz SMRs. *See* Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, *Second Report and Order*, ET Docket No. 94-32, 11 FCC Rcd 624, 648 (1995) (*GWCS Second Report and Order*); *800 MHz First Report and Order*, 11 FCC Rcd at 1483-84. Also, we have proposed to use EAs for the assignment of sixty channels in the 220-222 MHz band. *See Second Memorandum Opinion and Order and Third Notice of Proposed Rulemaking*, PR Docket No. 89-522, GN Docket No. 93-252, PP Docket No. 93-253, 11 FCC Rcd 188, 219 (1995) (*220 Third Notice*).

[38] Most entities licensed in these bands are common carriers. However, because sharing is permitted there also are several private systems licensed in these bands.

[39] Protection would be accomplished by meeting the MAS mileage separation requirements or the short spacing criteria. *See* 47 C.F.R. § 22.625 and § 101.105(c)(3). In addition, an EA licensee could negotiate alternative operational arrangements with the incumbent licensee.

service area. Further, we believe that it would be in the public interest to give incumbents the flexibility to modify or augment their systems as long as they do not encroach on co-channel operations of the geographic area licensee.[41]

20. To this end, we propose to define a service area for the protection of incumbent operations. In this regard, we note that incumbent operations must currently abide by a co-channel mileage separation based on an assumed 25-mile service area.[42] Accordingly, one option would be to use this as a basis for an incumbent protected service area. Under this approach, we propose to permit incumbents to make modifications to existing systems and to add new transmitters (*e.g.*, fill in "dead spots") as long as the signal level is not increased beyond this 25-mile area. Incumbents, however, would not be permitted to expand their systems without the consent of the geographic area licensee. This approach should ensure adequate protection of incumbent operations, without hampering the ability of geographic area licensees to construct stations throughout their authorized service area. Further, it is consistent with the rules we adopted in the 800 and 900 MHz SMR Services,[43] and the rules we have proposed for paging systems.[44] We seek comment on these proposals. Further, we seek comment on alternative approaches for defining a protected service area, including a definition specified in terms of signal strength (dBu contour).

4. Licensing

21. Under our proposed geographic area licensing approach, EA licensees would be authorized to construct master stations at any available site within the licensed area and on any channel for which they are licensed provided the operation does not require individual Commission review. All remote stations would be blanket licensed under the EA license. Under our proposal, EA licensees still would be required, however, to individually license any master station that: (1) requires the submission of an Environmental Assessment under 47 C.F.R. § 1.1307; (2) requires international coordination (*see supra* paragraph 34); or, (3) would affect the

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[40] Because 12.5 kHz, 25 kHz and 50 kHz operation is permitted, we will consider a channel to be co-channel if it falls within the bandwidth of the channel.

[41] We have previously determined that the public interest is not served by allowing incumbents to expand their systems without restriction. *See e.g., 800 MHz First Report and Order*, 11 FCC Rcd at 1513-14.

[42] 47 C.F.R. § 101.105(c)(3); *see Report and Order*, PR Docket No. 87-5, 3 FCC Rcd 1564 (1988).

[43] *800 MHz First Report and Order*, 11 FCC Rcd at 1514; *see also* Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands, *Second Report and Order and Second Further Notice of Proposed Rule Making*, PR Docket No. 89-553, PP Docket No. 93-253, GN Docket No. 93-252, 10 FCC Rcd 6884, 6901 (1995) (*900 MHz Second Report and Order*).

[44] *Notice of Proposed Rule Making*, WT Docket No. 96-18, PP Docket No. 93-253, 11 FCC Rcd 3108, 3116-17 (1996) (*Paging Notice*).

radio frequency quite zones described in 47 C.F.R. §§ 22.369 and 101.123. Regardless of whether an individual license is required, any MAS antenna structure that requires notification to the Federal Aviation Administration (FAA) must be registered with the Commission prior to construction.[45] It would be the EA licensee's responsibility to decide, in the first instance, whether to apply for an individual license for any given master station. We also propose to allow EA licensees to make system modifications within their service areas, *i.e.*, to add, subtract, move and otherwise modify their master station facilities, without any need for prior Commission consent provided individual Commission review is not required. We tentatively conclude that this simplified approach toward initial licensing and subsequent system modification will (1) increase operational flexibility, resulting in faster, more responsive service to the public, and (2) substantially reduce administrative burdens on both MAS licensees and the Commission. Further, this approach is consistent with how we handle systems in other services licensed on a geographic basis.[46]

22. By proposing an EA licensing approach we must address the issue of co-channel interference protection obligations of EA licensees with respect to other EA licensees, in particular licensees of adjacent areas. We propose to establish interference protection criteria between different service areas at service area borders.[47] Specifically, we propose to prohibit EA licensees from exceeding a signal level of 40 dBu V/m[48] at their service area boundaries, unless the bordering EA licensee agrees to a higher field strength. We also propose to require coordination of frequency use between co-channel adjacent EA licensees and all other affected parties. This approach provides EA licensees with a signal strength level sufficient to operate their systems up to the borders of their EAs, while also providing protection to adjacent operations. We seek comment on these proposals including whether (1) this restriction will further our goal of avoiding harmful interference without being an overly burdensome requirement and (2) we should use a different field strength level for an EA licensee's operations at its service area boundary.

23. In addition, we recognize that the licensing flexibility afforded EA licensees in the 928/959 MHz bands and potentially the 928/952/956 MHz bands may be limited due to the large number of systems already licensed in these bands, particularly in major markets. To assist EA licensees in consolidating spectrum in these bands we propose that: (1) if an incumbent has its license terminated by the Commission or cancels its license, the spectrum covered by the

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[45] *See* 47 C.F.R. Part 17. Antenna structures more than 200 feet above ground or located near or on specified airports must be notified to the FAA and registered with the Commission prior to construction. This requirement applies to all non-government antenna structures, regardless of the radio service licensees involved.

[46] *See, e.g., 800 MHz First Report and Order*, 11 FCC Rcd at 1498.

[47] *See id.* at 1518; *see also 900 MHz Second Report and Order*, 10 FCC Rcd at 6902.

[48] This is the same signal strength level used for 800 MHz SMR operations at EA borders. *See 800 MHz First Report and Order*, 11 FCC Rcd at 1518.

incumbent's authorization will automatically revert to the EA licensee, and (2) if an EA licensee negotiates to acquire an incumbent system by assignment or transfer, the assignment or transfer will presumptively be considered in the public interest. We tentatively conclude that granting these rights to EA licensees would give them greater flexibility in managing the spectrum and establishing wide-area systems.[49] We seek comment on these proposals.

5. Spectrum Block Size and Aggregation

24. We propose herein to assign geographic area licensees on a channel-by-channel basis. This raises the issue of whether we should impose a limit on the number of MAS channels that a single licensee may hold in each geographic area. We have imposed spectrum aggregation limits in a number of other services where we assign licenses on a geographic basis. For example, in the Interactive Video and Data Service ("IVDS"), narrowband PCS and the General Wireless Communications Service ("GWCS"), where there are only a limited number of available channels, we established such spectrum limits.[50] Also, we imposed a 45 megahertz cap on the aggregation of cellular, broadband PCS, and SMR spectrum within a geographic area because of the potential that aggregation in excess of this amount would limit entry by other competitors.[51]

25. The primary purposes of a spectrum aggregation limit are to (1) avoid an excessive concentration of licenses and ensure the dissemination of licenses among a wide variety of applicants (*e.g.*, maximize competition) and (2) prevent licensees from withholding capacity from the market (*e.g.*, minimize warehousing). We tentatively conclude that allowing licensees to aggregate MAS spectrum will not pose a risk of competitive harm. Further, we believe that given the number of channels available and the fact that numerous entities are already licensed and operating there is little risk of competitive harm. The risk of channel warehousing also appears limited; where licenses are subject to competitive bidding, licensees are unlikely to bid for more channels than they actually need or can use. Therefore, we tentatively conclude that a spectrum aggregation limit is unnecessary. We seek comment on these tentative conclusions. We also seek comment on whether it may be appropriate to establish a limit if we ultimately decide to allow mobile operations on a primary basis.[52] We recognize that expanding service options may make these channels similar to others where the Commission has imposed spectrum aggregation limits.[53]

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[49] *See, e.g., id.* at 1501.

[50] *See* Amendment of Parts 0, 1, 2 and 95 of the Commission's Rules to Provide for Interactive Video and Data Service, *Report and Order*, GEN Docket 91-2, 7 FCC Rcd 1630 (1992); *Narrowband PCS Report and Order*, 8 FCC Rcd at 7168; *GWCS Second Report and Order*, 11 FCC Rcd at 645.

[51] *See CMRS Third Report and Order*, 9 FCC Rcd at 8109-10; *see also* Amendment of Parts 20 and 24 of the Commission's Rules -- Broadband PCS Competitive Bidding and Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, WT Docket No. 96-59 (released June 24, 1996).

[52] *See infra* paras. 34-35.

[53] *See* 47 C.F.R. § 24.101.

6. Partitioning and Disaggregation

26. We recently proposed a detailed framework for revising the geographic partitioning and spectrum disaggregation rules for broadband PCS.[54] Consistent with the broadband PCS proposals, we propose to make these options available to all qualified MAS licensees. We describe our proposals below, and request comment on these approaches. In addition, as discussed *infra* regarding the competitive bidding provisions,[55] we propose that, in the event that any such options are provided in the MAS context, their use be restricted for MAS licenses acquired using special provisions.

27. *Partitioning.* Under the current general competitive bidding rules, the Commission "may permit partitioning of service areas in particular services for eligible designated entities."[56] For MAS, we propose to allow all MAS licensees to partition at any time to any entity eligible for an MAS license. We note that small businesses[57] and others may face certain barriers to entry into the provision of spectrum-based services which, we believe, may be addressed by changes in our partitioning rules. We tentatively conclude that providing MAS licensees with the flexibility to partition their geographic service areas would create smaller areas that could be licensed to small businesses, including those entities which previously may not have had the resources to participate successfully in spectrum auctions. We also tentatively conclude that partitioning may provide a funding source that would enable licensees to construct their systems and provide the latest in technological enhancements to the public.[58] We seek comment on these tentative conclusions. In particular, commenters are invited to address whether the partitioning scheme, discussed *infra*, will help eliminate market entry barriers for small businesses pursuant to Section 257 of the Communications Act of 1934, as amended.[59]

28. We seek comment on what should be the respective obligations of the participants in a partitioning arrangement. First, with respect to scope of MAS partitioned areas, we

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[54] Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees, WT Docket No. 96-148, Implementation of Section 257 of the Communications Act -- Elimination of Market Entry Barriers, GN Docket No. 96-113, *Notice of Proposed Rulemaking*, 11 FCC Rcd 10187 (1996) ("*Broadband NPRM*"). "Partitioning is the assignment of geographic portions of the . . . license along geopolitical or other boundaries. Disaggregation is the assignment of discrete portions or 'blocks' of spectrum licensed to a geographic licensee or qualifying entity." *Id.* at 10189 n.1.

[55] *See infra* paras. 52-55.

[56] 47 C.F.R. § 1.1110(d).

[57] We seek comment *infra* on whether, and how, we should define "small business" in the context of MAS. *See infra* para. 53.

[58] *See Broadband NPRM*, 11 FCC Rcd at 10199.

[59] 47 U.S.C. § 257.

tentatively conclude that a flexible approach, similar to the one we adopted for broadband PCS, is appropriate for MAS licenses. Therefore, we propose to permit partitioning of MAS licenses based on any geographic area defined by the parties to a partitioning arrangement. We seek comment on this proposal, and in particular on whether this proposal is consistent with our licensing of MAS spectrum, and whether there are any technical or other issues unique to MAS that might impede the adoption of a flexible approach to defining partitioned license areas.

29. Second, with respect to construction requirements, we seek comment as to which party should be held responsible for satisfying outstanding construction requirements. In this *Notice*, we have proposed construction requirements for geographic MAS licensees at the five-year and ten-year benchmarks. In the *Partitioning Report and Order*, we adopted two construction options for partitioning broadband PCS licensees which give the parties the flexibility to choose how to apportion the responsibility to build out the partitioned license areas. We tentatively conclude that a similar approach is appropriate for the MAS context. Thus, we propose two options for meeting the applicable MAS construction requirements in a partitioning arrangement: (1) the partitionee can certify that it will satisfy the same construction requirements as the original licensee with the partitionee meeting the requirements in its partitioned area and the partitioner being responsible for satisfying the requirements in the area it has retained; or (2) the original licensee can certify that it has already met or will meet its five-year construction requirement and that it will meet the 10-year requirement for the entire market involved. Under the second option, because the original licensee retains the responsibility for meeting the construction requirements for the entire license area, the partitionee is permitted to satisfy a substantial service requirement for its partitioned license area at the end of the ten-year license term. We also propose to require that the parties to such partitioning arrangements file supporting documentation showing compliance with the applicable construction requirements. We seek comment on these proposals. We also seek comment on whether, and if so, how the option of partitioning could be extended to incumbent MAS licensees as well.

30. *Disaggregation.* We also propose to permit disaggregation of MAS spectrum. Thus, an MAS licensee would be allowed to transfer a portion of its spectrum in its service area to another entity. We seek comment on this proposal. We believe that once an initial geographic area MAS license is assigned, the licensee should ordinarily be free to disaggregate spectrum in order to operate in a manner which it determines to be efficient.

31. We seek comment on what should be the respective obligations between parties to a disaggregation arrangement. First, we ask commenters to discuss whether minimum disaggregation standards are necessary if we permit disaggregation of MAS spectrum. We seek comment as to whether we should adopt standards which would be flexible enough to encourage disaggregation while providing a standard which is consistent with our technical rules by which we would be able to track disaggregated spectrum and review disaggregation proposals in an expeditious manner.

32. Second, with respect to construction requirements, we seek comment as to which party should be held responsible for satisfying outstanding construction requirements. We

propose to retain the underlying five- and ten-year construction requirements for the MAS license as a whole, but allow either party to the disaggregation agreement to meet the construction requirements with respect to the disaggregated portion of the license. We also propose that parties seeking Commission approval of a disaggregation agreement must certify which party will assume responsibility for complying with the applicable construction requirements, including the option of sharing responsibility for meeting such requirements. We seek comment on our proposals.

33. In addition, we ask commenters to address whether combined partitioning and disaggregation should be permitted for MAS spectrum. By "combined" partitioning and disaggregation, we refer to circumstances in which a licensee would be authorized, for example, to obtain a license for a portion of a MAS licensee's service area on a portion of the spectrum authorized to that licensee. We tentatively conclude that we should permit such combinations in order to provide parties with the optimal flexibility to respond to market forces and demands for services relevant to their particular locations and service offerings. In the context of both partitioning and disaggregation, we propose that our MAS rules should provide that parties obtaining partitioned licenses or disaggregated spectrum hold their license for the remainder of the original licensee's license term. This approach is consistent with our decision in the *Partitioning Report and Order*. We tentatively conclude that limiting the license term of the partitionee and disaggregatee is necessary to ensure that there is maximum incentive for parties to pursue available spectrum as quickly as practicable and not in a manner which would circumvent our established license rules and unnecessarily delay service to the public. We seek comment on this proposal and whether MAS partitionees and disaggregatees should be afforded the same renewal expectancy as other MAS licensees. In sum, we tentatively conclude that our proposals to permit partitioning and disaggregation in the manner described above would allow the MAS spectrum to be used most efficiently, speed service to unserved or underserved areas, and facilitate competition. We solicit comment on this analysis of the intended effects of our proposals.

7. Mexican and Canadian Border Areas

34. In the Mexican and Canadian border areas, MAS channel availability may be restricted by treaty, and limitations on Effective Radiated Power (ERP) and antenna height may be placed on certain channels.[60] As a result, some MAS channels may not be available in EAs or parts of EAs in border areas, or there may be significant restrictions on ERP or antenna height or both which may make geographic area licenses in these areas less attractive. In other services where we have implemented geographic area licensing, we have decided not to distinguish between border areas and non-border areas.[61]

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[60] *See, e.g.*, Arrangement Between The Department of Communications of Canada and The Federal Communications Commission of the United States of America Concerning the Use of the Bands 928 to 929 MHz and 952 to 953 MHz Along the United States - Canada Border, *Public Notice*, DA 91-999, released August 13, 1991.

[61] *See, e.g., 900 MHz Second Report and Order*, 10 FCC Rcd at 6908.

35. We propose to license all EAs on a uniform basis without regard to whether all or part of the EA is in a border area or a channel is restricted in some fashion. Geographic area licensees would be entitled to use any authorized channels subject to the relevant rules regarding international assignments and coordination of such channels. We believe that applicants are in the best position to assess the affects of any limitations on the use of channels when valuing those geographic areas for competitive bidding purposes.

8. Construction/Coverage Requirements

36. Currently, each MAS master station licensed under Part 101 must be placed in operation within eighteen months from the initial date of grant.[62] In order to be considered in operation, an MAS station must be serving at least four separate active remote stations.[63] These requirements are intended to provide some assurance that spectrum is used effectively and service is implemented promptly. We tentatively conclude that these requirements should be retained for incumbent licensees. Such incumbents operate within existing non-geographic service areas, and we have proposed in this *Notice* to grandfather these licensees and their operations.

37. We believe, however, that different treatment is appropriate for new licensees that will be operating as proposed here under a geographic area license with flexible service rules. When designing competitive bidding systems, Section 309(j)(3) of the Act[64] states, in part, that "the Commission shall include safeguards to protect the public interest in the use of the spectrum . . . ." In addition, Section 309(j)(4)(B) states that the Commission shall:[65]

> include performance requirements, such as appropriate deadlines and penalties for performance failures, to ensure prompt delivery of service to rural areas, to prevent stockpiling or warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services.

38. We have previously found that these provisions could be satisfied through construction requirements.[66] In the MAS context, we believe that some coverage requirements

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[62] *See* 47 C.F.R. § 101.63.

[63] *See* 47 C.F.R. § 101.147(b).

[64] 47 U.S.C. § 309(j)(3).

[65] 47 U.S.C. § 309(j)(4)(B).

[66] *See, e.g., Implementation of Section 309(j) of the Communications Act -- Competitive Bidding,* PP Docket No. 93-253, *Fifth Report and Order,* 9 FCC Rcd 5532, 5570 (1994); *Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act - Competitive Bidding,* PP Docket No. 93-253 and MM Docket No. 94-131, *Report and Order,* 10 FCC Rcd 9589, 9659-60 (1995);

may be needed as performance requirements to deter speculation while promoting prompt service to the public. An additional public interest benefit of imposing coverage requirements on geographic MAS licenses is that they would hinder warehousing, promote rapid deployment of new technologies and services and promote service to rural areas. We nonetheless are concerned that strict construction requirements may not be the most suitable and effective means of addressing the statute's concerns given that MAS spectrum may be used to offer a variety of services, including point-to-point, point-to-multipoint, multipoint-to-point, and mobile. As a result, we note that strict construction requirements might result in uneconomic construction: construction in geographic areas different than those that would be served in a competitive environment; deployment at a different rate than would occur in a competitive environment; or deployment of technology and equipment differing from that which competition would dictate. Further, strict construction requirements might have the unintended consequence of causing firms to build first in urban areas where the mandatory benchmarks could be met most cheaply, and thus slow the development of service to rural areas.

39. Balancing all of the above factors, we tentatively conclude that geographic MAS licensees should be subject to liberal construction requirements. We seek comment on this tentative conclusion. Specifically, we propose that geographic MAS licensees must provide coverage to at least one-fifth of the population in their service areas or substantial service within five years of the license grant. In addition, geographic MAS licensees must make a showing of substantial service within ten years of being licensed. We further propose that failure to meet these coverage requirements will result in automatic termination of the geographic MAS license. We note that this approach is consistent with our rules for other services.[67] We seek comment on these proposals and any alternatives thereto.

9. Technical Flexibility

40. The basic channelization in the MAS bands is 12.5 kHz. However, entities currently may be licensed for 25 kHz and 50 kHz operations upon a showing of need.[68] We propose to allow geographic area licensees to combine contiguous channels resulting in bandwidths up to 50

Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, ET Docket No. 94-32, *Second Report and Order*, 11 FCC Rcd 624, 669-670 (1995).

[67] *See, e.g.,* Amendment of the Commission's Rules to Establish New Personal Communications Service, GEN Docket No. 90-314, *Second Report and Order*, 8 FCC Rcd 7700, 7754, ¶ 134 (1993); Amendment of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the specialized Mobile Radio Pool, PR Docket No. 89-553, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 10 FCC Rcd 6884, 6899, ¶ 43; Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service, MM Docket No. 94-131, *Report and Order*, 10 FCC Rcd 9589, 9613, ¶ 43.

[68] *See* 47 C.F.R. §§ 101.109, 101.147(b).

kHz without a showing of need. Permitting licensees to combine channels without a showing of need will enable them to employ the widest variety of technologies to best meet the communications requirements of consumers and reduce regulatory burdens.[69] Geographic area licensees would also be able to subdivide their 12.5 kHz channels.[70] Further, we propose the out-of-band emission rules apply only to the extent necessary to protect operations outside of the licensee's EA and to spectrum inside if used by incumbents.[71] EA licensees, however, would be free to negotiate with adjacent EA licensees concerning interference rights. We also tentatively conclude that it is appropriate to extend the same technical flexibility adopted for EA licensees to incumbent licensees. We seek comment on these proposals. We also seek comment on whether it would be in the public interest to increase the maximum authorized bandwidth beyond the current maximums of 12.5 kilohertz, 25 kilohertz, and 50 kilohertz.[72] For instance, under a geographic area licensing approach, should MAS channel pairs be combined to assign larger frequency blocks? Of the thirty-five channel pairs available in the 932/941 MHz band,[73] we could, for instance, combine channels to make one ten-channel block, two six-channel blocks, four four-channel blocks, four two-channel blocks, and five one-channel blocks. We seek comment on these approaches.

10. Operational Flexibility

41. The current rules governing MAS allow licensees to use certain MAS channels for other types of operations besides point-to-multipoint transmissions. The rules, for instance, allow mobile operations on certain paired channels on a secondary basis.[74] Certain point-to-point operations also are permitted on a secondary basis.[75] Likewise, MAS licensees may transmit ancillary one-way communications on certain paired channels on a case-by-case basis.[76] Our original purpose in adopting limitations on these uses was to ensure that the spectrum would be used primarily to satisfy bona fide point-to-multipoint requirements.

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[69] *See 220 Third Notice*, 11 FCC Rcd at t ¶ 81. *See also* Amendment of Parts 2, 15, and 90 of the Commission's Rules and Regulations to Allocate Frequencies in the 900 MHz Reserve Band for Private Land Mobile Use, *Report and Order*, GEN Docket No. 84-1233, 2 FCC Rcd at 1825, ¶ 74.

[70] *See* 47 C.F.R. § 101.147(b).

[71] *See CMRS Third Report and Order* at ¶ 161. *See also 900 MHz Second Report and Order* at ¶ 61

[72] *See* 47 C.F.R. §§ 101.109, 101.147.

[73] There are forty 12.5 kilohertz channels pairs in the 932/941 MHz band. We are, however, proposing to set aside five channel pairs for public safety and Federal Government use. *See supra* paragraphs 63-64.

[74] 47 C.F.R. § 101.105 (c)(3).

[75] 47 C.F.R. § 101.147 (b).

[76] *Id.*

42. We are proposing herein to employ a new geographic area licensing approach for the 932/941 MHz and 928/959 MHz bands. We also ask for comments on extending geographic area licensing to the 928/952/956 MHz bands. We believe that affording MAS licensees additional operational flexibility would offer a number of benefits. For example, lifting the operational restrictions on for-profit third party providers serves to broaden the array of services offered by these licensees and thus benefits the public through increased competition. To compete effectively in today's changing communications marketplace, we believe licensees should have the ability to provide consumers a wide array of services and to have the ability to respond quickly to changing consumer demands. For these reasons, we propose to allow MAS geographic area licensees to utilize both point-to-point and point-to-multipoint operations and to provide fixed[77] and mobile service on a co-primary basis. This approach would continue, however, to prohibit MAS licensees from providing broadcast services. We recognize that permitting point-to-point operations would be a departure from our previous decisions, where we stated that MAS spectrum should be reserved for point-to-multipoint operations.[78] We tentatively conclude, however, that permitting this additional flexibility, along with the flexibility afforded by the option to provide mobile service, is in the public interest, and we seek comment on this approach. Our proposed approach is consistent with current proposals[79] and the policies set forth in the Communications Act.[80] Also, we tentatively conclude that it is appropriate to extend the same operational flexibility proposed for EA licensees to incumbent licensees. We seek comment on this tentative conclusion. We seek comment on the following issues as well:

(a) Should the Commission allow the operation of the market to determine the most efficient use of MAS as we have proposed?

(b) How will expanding licensee flexibility affect further development of MAS?

[77] Fixed service includes both point-to-point and one-way transmissions.

[78] *See Report and Order*, WT Docket No. 94-148 and CC Docket No. 93-2, at ¶ 47; *Report and Order*, 3 FCC Rcd at 1568 & nn.3, 54.

[79] *See e.g.*, In the Matter of Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Services, PR Docket No. 89-552, *Second Memorandum Opinion and Order and Third Notice of Proposed Rule Making*, [cite] (proposal to allow fixed operations on a primary basis with land mobile operations in band). In the Matter of Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, WT Docket No. 96-6, *Notice of Proposed Rule Making*, [cite] (proposal to allow broadband CMRS licensees to provide fixed services with mobile operations in band).

[80] *See* 47 U.S.C. § 157; *see also* S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. 1 (1996).

(c) For mobile operations, should we consider restricting interconnection with the public switched network (PSN)?[81]

(d) Given the different operating characteristics of fixed and mobile, should the technical rules be revised to avoid the potential for harmful co-channel interference, and if so, how?

11. Regulatory Status

43. We propose to allow MAS geographic area licensees to provide both fixed and mobile service. Under this approach, geographic area licensees could provide a variety of mobile, fixed, point-to-point and point-to-multipoint services. While our proposal increases operational flexibility, thereby allowing EA licensees to better respond to market demand, it also makes it difficult to determine the regulatory status of each licensee. This process could be further complicated if we adopt rules allowing interconnection with the PSN.

44. For the purposes of this *Notice*, we propose an approach for determining regulatory status similar to that adopted for the General Wireless Communications Service (GWCS).[82] We propose to rely on applicants to specifically identify the type of service or services they intend to provide and that they include sufficient detail to enable the Commission to determine whether the service will be offered as a commercial mobile radio service,[83] a private land mobile radio service, a common carrier fixed service, or a private fixed service. To simplify the process, we propose to establish a presumption that MAS geographic area licensees be telecommunications carriers regulated as common carrier. Depending upon our final decision in regard to the 928/952 MHz and 956 MHz bands, we may also establish a presumption that those specific bands are private. Any interested party would be able to challenge the regulatory status granted an MAS geographic area licensee. This approach should allow us to carry out our regulatory responsibilities without imposing a hardship upon licensees. We note that the type of radio service provided will depend on our conclusions after reviewing the record in this proceeding.

45. We seek comment on the most efficient manner in which to administer the requirements of the Communications Act and our rules and, at the same time, grant licensees as

[81] Interconnection with the PSN, coupled with allowing mobile offerings, might change the regulatory status of MAS, requiring an application of different and more restrictive regulation from that currently applied. *See Public Notice*, Information for Part 90 Licensees Subject to Reclassification as Commercial Mobile Radio Service Providers on August 10, 1996 -- Wireless Bureau Answers Frequently Asked Questions Regarding CMRS Status, DA 96-1245, 11 FCC Rcd 9267 (1996).

[82] *GWCS Second Report and Order* at 126.

[83] *See* 47 U.S.C. § 332(d)(1).

much operational flexibility as possible.[84] We also request that commenters address whether it is necessary for the Commission to require licensees to notify the Commission if they change the type of service offered using some or all of their licensed spectrum even though the new use would be permissible under our rules. If so, what requirements should be met in effecting notification? We also request comment on whether we should develop a standard long-form license application for MAS on which the applicant would specify its intended regulatory status, an approach we used for the GWCS.[85] Finally, we seek comment on the implications to this analysis of Section 10 of the Communications Act of 1934, as amended, and the extent, if any, to which Section 10 forbearance should apply.[86]

C. Competitive Bidding Issues

1. Authority to Conduct Auctions

46. As discussed *supra*, the Commission is authorized by Section 309(j) of the Communications Act to employ auctions to choose among mutually exclusive applications for initial licenses. Under Section 309(j), in order to employ auctions for a particular service, the Commission must determine that "the principal use of [the] spectrum will involve, or is reasonably likely to involve, the licensee receiving compensation from subscribers."

47. Specifically, the statute permits auctions where: (1) mutually exclusive applications for initial licenses are accepted for filing by the Commission; (2) the principal use of the spectrum will involve, or is reasonably likely to involve, the receipt by the licensee of compensation from subscribers in return for enabling those subscribers to receive or transmit communications signals utilizing the licensed frequencies;[87] and (3) the public interest objectives of Section 309(j) would be served by subjecting mutually-exclusive applications to competitive bidding. These objectives are:

> (A) the development and rapid deployment of new technologies, products, and services for the benefit of the public, including those residing in rural areas, without administrative or judicial delays;

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[84] We note here that we are addressing similar concerns in regard regulatory status and increasing flexibility in the CMRS. *See* Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, *First Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 96-6, FCC 96-283, adopted June 27, 1996.

[85] *GWCS Second Report and Order*, 11 FCC Rcd at 672.

[86] *See* 47 U.S.C. § 160.

[87] We determine principal use by comparing the amount of non-subscription use made by the licensees in a service as a class with the amount of subscriber-based use on the basis of information throughput, time, or spectrum. *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2354.

(B) promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women;

(C) recovery for the public of a portion of the value of the public spectrum resource made available for commercial use and avoidance of unjust enrichment through the methods employed to award uses of that resource; and

(D) efficient and intensive use of the electromagnetic spectrum.

48. The Commission requested comment on whether MAS licenses should be subject to competitive bidding in a 1993 *Notice of Proposed Rule Making* in the competitive bidding docket.[88] At that time, the Commission stated that "we [could not] be certain that the principal use of [the] frequencies [was] reasonably likely to involve the provision of service to subscribers," and tentatively concluded that licenses to provide POFM MAS should not be awarded through competitive bidding.[89] The Commission received three comments arguing that POFM MAS is principally used for private service. Based on this input, the Commission decided to exempt the MAS service (as regulated under the then Part 94) from competitive bidding.[90] The Commission also decided to award licenses for the pending pre-July 26, 1993, mutually exclusive MAS applications for the 932/941 MHz bands by lottery.[91] In the same proceeding, the Commission concluded that mutually exclusive applications in the Part 22 DPLM service would be subject to competitive bidding.[92] Consequently, mutually exclusive applications in the 928/959 MHz and 932/941 MHz bands, if filed under Part 22, are subject to competitive bidding.[93]

49. Based on our review of the over 50,000 applications filed for MAS licenses in the 932/941 MHz bands,[94] it now appears that the proposed use of some of the MAS spectrum has changed since we made our initial determination in the *Competitive Bidding Second Report and Order*. Of those applications filed for channels in the 932/941 MHz bands, the vast majority (over 95 percent) were filed by entities planning to provide a subscriber-based service. Given

[88] *Notice of Proposed Rule Making*, PP Docket No. 93-253, 8 FCC Rcd 7635, 7659-60 (1993).

[89] *Id.* at 7660 n.156.

[90] *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2354.

[91] *Id.* at 2354 and n.25.

[92] *Id.* at 2359.

[93] *See* 47 C.F.R. § 22.131.

[94] *See* para. 5, *supra*.

this data, we believe it is reasonable to conclude that the principal use of this spectrum would involve, or is reasonably likely to involve, subscriber-based service. Accordingly, we tentatively conclude that the principal use of spectrum in the 932/941 MHz bands is, or will likely be used, to provide subscriber-based services. We request comment on this tentative conclusion.

50. Moreover, we note that Part 22 use of the 928/959 MHz bands is already subject to competitive bidding in the event of mutually exclusive applications. Although some entities licensed in the 928/959 MHz bands use the spectrum to satisfy private or internal communications needs, the principal use of these bands clearly involves the provision of subscriber-based services.[95] As discussed *supra* at paragraph 12, we also seek comment on how frequencies in the 928/952/956 MHz bands presently are being used.

51. We also now address whether the remaining statutory criteria under Section 309(j) can be met. We observe that the majority of applications presently on file are mutually exclusive. In addition, given the substantial level of interest in providing MAS service (as demonstrated by the more than 50,000 applications that have been filed to date), we anticipate that mutual exclusivity likely would exist if additional applications were accepted for filing. We believe that using competitive bidding as a means of awarding MAS licenses for the 932/941 MHz and 928/959 MHz bands will promote the objectives of Section 309(j)(3). More than any other method of awarding licenses, auctions are likely to foster the rapid deployment of new technologies and products by placing spectrum in the hands of those who value it most highly. It is also our view that, by fostering the rapid deployment of MAS services, auctions will serve Congress' goal of bringing new services as expeditiously as possible to the public, including rural areas. With more than 50,000 pending applications, subjecting these to a lottery process would be time-consuming and complex. Several months would be spent simply establishing chains of mutual exclusivity among the applicants. During a comparable period of time, an auction for the same frequencies could be completed. In this respect, we observe that processing of more than 50,000 220-222 MHz applications using the lottery procedure took more than two years to complete. In addition, unlike lotteries or comparative hearings, auctions will result in recovering for the public a portion of the value of the spectrum. Finally, we believe that the rapid award of licenses through the auction process will promote efficient use of the MAS spectrum. We seek comment on these proposals, as well as on the overall proposal to use competitive bidding to award those licenses for 12.5 kilohertz channel pairs supporting subscriber-based services.

2. Disposition of Previously Filed Applications

52. As noted, we currently have over 50,000 applications for licenses in the 932/941 MHz bands, filed pursuant to filing windows of January-February 1992. Given the fact that these applications were filed before July 26, 1993, we have the discretion to choose to award

[95] Mutually exclusive applications filed under Part 22 are subject to competitive bidding. *See Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2359.